

ogy clinic within the period under review. 22.2% of patients had seizure disorder, mostly primary. Extra-pyramidal movement disorders, predominantly Parkinson's disease, made up 11.3%, while Headache was the diagnosis in 10.1%.

**Conclusion:** Stroke appears to be the most common neurological disorder in our clinic today. However it probably has a higher prevalence if neurology out-patient clinics are merged with all neurological admissions, into which all unregistered deaths due to stroke will be considered. Primary prevention of stroke through efficient general medical practice and health education measures may well aid to reduce this burden.

### WSC-0294

#### Epidemiology of Stroke

#### Epidemiology of stroke in a rural community in Southeastern Nigeria

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**Introduction:** The prevalence and incidence of stroke vary from community to community worldwide. Nonetheless, not much is known about the current epidemiology of stroke in rural Nigeria and indeed Africa.

**Aims:** The aim was to determine the current epidemiology of stroke in a rural community in Southeastern Nigeria while the objective was to determine the prevalence of stroke in the different segments of the population.

**Methods:** We carried out a two-phase door-to-door survey in Ukpo- a rural predominantly low-income community in Anambra, Southeastern Nigeria. We used a modified World Health Organization (WHO) protocol for detecting neurological diseases in the first phase and a stroke-specific questionnaire and neurological examination in the second phase. An equal number of sex and age matched stroke-negative persons were examined.

**Results:** We identified 10 stroke subjects in the study. The crude prevalence of stroke in rural Nigeria was 1.63 (95% CI = 0.78–3.00) per 1000 population. The crude prevalence of stroke in males was 1.99 (95% CI = 0.73–4.33) per 1000 while that for females was 1.28 (95% CI = 0.35–3.28) per 1000 population. The peak age specific prevalence of stroke was 12.08 (95% CI = 3.92–28.19) per 1000 while after adjustment to WHO world population, the peak was 1.0 (95% CI = 0.33–2.33) per 1000.

**Conclusion:** The prevalence of stroke was found to be higher than previously documented in rural Nigeria with a slightly higher prevalence in males than females. This is however comparable to data from rural Africa.

### WSC-1270

#### Epidemiology of Stroke

#### A prospective study of serum high-density lipoprotein cholesterol and recurrent stroke risk

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**Introduction:** Lipid plays a key role in stroke recurrence. Seldom research on exploring the relationship between high-density lipoprotein cholesterol (HDL-C) and stroke recurrence in China was done.

**Aims:** To investigate the association between HDL-C and ischemic stroke recurrence.

**Method:** A total of 1074 patients with ischemic stroke were enrolled from 5 community health centers and underwent baseline surveys during the period of Jan. 2003 to Dec. 2006. After baseline surveys, patients were

followed up every 6 months until December 31, 2008. The new stroke events were recorded as the study endpoint.

**Results:** The proportions of patients with high (>1.04mmol/L), appropriate (0.91–1.04mmol/L) and low.

**Conclusions:** HDL-C was an independent protective factor of recurrent stroke. HDL-C anomaly contributed to the greater effectiveness than non-HDL-C anomaly on stroke recurrence.

### WSC-0602

#### Epidemiology of Stroke

#### Long-term trends in stroke incidence in New Zealand: 1981–2012

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**Background:** In the context of declining stroke mortality rates, reliable data on long-term trends of stroke incidence and case fatality is required to understand reasons for the decline and to plan long-term health care stroke services and to monitor the effects of stroke prevention in the community.

**Aim:** To determine long-term trends in stroke incidence and 28-day case-fatality in Auckland, New Zealand (NZ) over three decades from 1981 to 2012.

**Method:** Four population-based stroke incidence studies: 1981–1982, 1991–1992, 2002–2003, and 2011–2012. All four studies (one year recruitment period each) used multiple overlapping sources of information to ensure complete case ascertainment. The “hot-pursuit” method of case ascertainment was used across all studies to register all strokes in people ≥15 years, normally resident within the Greater Auckland Region.

**Results:** Overall, there was a 23% reduction in age-adjusted stroke incidence rates: from 156/100,000 person-years in 1981–1982 to 119/100,000 person-years in 2011–2012 (p for trend <0.0001). The mean age of patients at stroke onset did not significantly change (71.2 [SD 13.3] years in 1981–1982 and 71.6 [SD 14.9] years in 2011–2012). Case-fatality at 28 days declined by 42% – from 33% in 1981–1982 to 19% in 2011–2012 (p for trend <0.0001)

**Conclusions:** Over the last 3 decades in NZ, there has been a significant decline in both overall incidence and early case-fatality suggesting improvements in prevention as well as acute treatment.